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| 10/539,955 | 06/17/2005 | Horst Glatz | 5200.P0067US | 8659 |
| 23474 7590 07/30/2010 FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD | | | EXAMINER | |
| | | | CHANG, RICK KILTAE | |
| KALAMAZOO, MI 49008-1631 | | | ART UNIT | PAPER NUMBER |
| | | | 3726 | • |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/539 955 GLATZ ET AL. Office Action Summary Examiner Art Unit Rick K. Chang 3726 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 30 March 2010. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 2-17 is/are pending in the application. 4a) Of the above claim(s) that are not listed in item 6 below is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 2-5 and 17 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)

Paper No(s)/Mail Date

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/06)

Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/30/10 has been entered.

Specification

- The abstract of the disclosure is objected in line 2: delete "a production line and".
 Correction is required. See MPEP § 608.01(b).
- The substitute specification filed 8/24/09 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: the specification lacks section headings.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
 obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 17 and 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over
 Uhlmann et al (US 4,393,566) in view of Uhlmann et al (US 3,934,449; hereinafter referred to as "Un"), and further in view of N. A. Franks (US 3,568,488).

Re claim 1: Uhlmann discloses producing, coiling and uncoiling the drawn heatexchanger tube material made of a non ferrous metal (copper) from a storage device, Application/Control Number: 10/539,955

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straightening the drawn tube material, annealing and subsequently cooling the drawn tube material before or after cutting (Abstract, entire cols. 1-7), except for coiling the drawn heat-exchanger tube material horizontally in a round open-top container; uncoiling the drawn heat-exchanger tube material from the container; bending the tube portions into a U-shape.

Un discloses coiling the drawn heat-exchanger tube material horizontally in an open-top container; uncoiling the drawn heat-exchanger tube material from the container (Figs. 1-2).

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide a round container because Applicant has not disclosed that providing a round container provides an advantage, is used for a particular purpose, or solves a stated problem. It is obvious and well known in the art that the Un's container (6) is also rounded to allow for the coiled tubing to expand inside the container without any gaps or kinks caused by different configuration of the container. Therefore, it would have been an obvious matter of design choice to modify Uhlmann and Un to obtain the invention as specified in claim 17.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Uhlmann by coiling the drawn heat-exchanger tube material horizontally in a round open-top container; uncoiling the drawn heat-exchanger tube material from the container, as taught by Un, for the purpose of preventing unexpected uncoiling of the coiled tube material.

Franks discloses bending the tube portions into a U-shape (Fig. 7, copper tubes for cooling purposes).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Uhlmann by bending the tube portions into a U-shape, as taught by Franks, for the purpose of meeting the design criteria.

Re claims 2, 5: Uhlmann discloses that the drawn tube material or the tube portions are subjected to quality control in one of steps a) to c) and after cutting to length for separation into tube portions, defective tube portions are sorted out after the quality control (col. 7, lines 10-13; it is inherent that if the desire results are not met, the tube portions are discarded from the ones that met the desire results).

Re claims 3-4: Uhlmann discloses that the drawn tube material (i) is flushed with inert gas and the inert gas flows counter to the direction in which the drawn tube material (I) is uncoiled (col. 1, lines 44-68 and entire cols. 2-7).

Response to Arguments

 Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Please provide reference numerals (either in parentheses next to the claimed limitation or in a table format with one column listing the claimed limitation and another column listing corresponding reference numerals in the remark section of the response to the Office Action) to all the claimed limitations as well as support in the disclosure for better clarity (optional).
Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that

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the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick K. Chang whose telephone number is (571) 272-4564. The examiner can normally be reached on 5:30 AM to 1:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rick K. Chang/ Primary Examiner, A.U. 3726

RC

July 29, 2010

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